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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|---------------------|-------------------------|---------------------|------------------|
| 10/748,014 | 12/30/2003 | Sun-Chueh Kao | 2002U035.US | 6457 |
| 75 | 90 04/13/2006 | EXAMINER | | |
| KEVIN M. FA | | RABAGO, ROBERTO | | |
| SUITE 1950 | ECHNOLOGIES, L.L.C. | ART UNIT | PAPER NUMBER | |
| 5555 SAN FEL | | 1713 | | |
| HOUSTON, T | X //056-2/46 | DATE MAILED: 04/13/2006 | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | Application N | 0. | Applicant(s) | | | | |
|--|---|--|---|---|--|-------------|--|--|--|
| Office Action Summary | | 10/748,014 | | KAO, SUN-CHUEH | | | | | |
| | | Examiner | | Art Unit | | | | | |
| | • | | Roberto Rába | go | 1713 | | | | |
| Period fo | The MAILING DATE of this communior Reply | ication appe | ars on the co | er sheet with the co | orrespondence ad | ldress | | | |
| WHIC - Exte after - If NC - Failu Any | ORTENED STATUTORY PERIOD FO CHEVER IS LONGER, FROM THE Management of time may be available under the provisions of SIX (6) MONTHS from the mailing date of this common operiod for reply is specified above, the maximum star ure to reply within the set or extended period for reply we reply received by the Office later than three months affect patent term adjustment. See 37 CFR 1.704(b). | AILING DA of 37 CFR 1.136 nunication. atutory period will will, by statute, of | TE OF THIS (6(a). In no event, he ill apply and will expi cause the applicatio | COMMUNICATION owever, may a reply be timire SIX (6) MONTHS from to become ABANDONED | . ely filed the mailing date of this c D (35 U.S.C. § 133). | · | | | |
| Status | • | | | | | | | | |
| 1)[| Responsive to communication(s) filed | d on 10 la | กแลก/ 2006 | | | | | | |
| 2a)□ | | | nuary 2000. action is non-f | inal | | | | | |
| 3)□ | | - | | | socution as to the | o morite is | | | |
| ا ال | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | | | | |
| | closed in accordance with the practic | e under L | C parte Quayre | i, 1935 C.D. 11, 45 | 3 O.G. 213. | | | | |
| Dispositi | ion of Claims | | | | | | | | |
| 4)🖂 | Claim(s) 1-63 is/are pending in the a | pplication. | | | | | | | |
| | 4a) Of the above claim(s) 1-37 is/are | withdrawn | from consider | ation. | | • | | | |
| 5)□ | · · · · · · · · · · · · · · · · · · · | | | | | | | | |
| 6)⊠ | Claim(s) 38-63 is/are rejected. | | | | | | | | |
| 7) | Claim(s) is/are objected to. | | | | | | | | |
| 8)□ | Claim(s) are subject to restrict | tion and/or | election requi | rement. | | | | | |
| Applicati | ion Papers | ÷ | | | | | | | |
| 9)□ | The specification is objected to by the | - Evaminer | | | | | | | |
| - | 9)∐ The specification is objected to by the Examiner. 10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner. | | | | | | | | |
| | | | | | | | | | |
| | Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | | | | |
| 11) | The oath or declaration is objected to | | | | | | | | |
| ''/ | The bath of declaration is objected to | by the Lake | anninen. Note ti | ie attached Onice | ACION OF IONIT P | O-152. | | | |
| Priority u | ınder 35 U.S.C. § 119 | | | | | | | | |
| _ | 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No | | | | | | | | |
| | | | | • | | | | | |
| | 3. Copies of the certified copies of | | | | d in this National | Stage | | | |
| * 0 | application from the Internation | | • | | . | · | | | |
| 3 | See the attached detailed Office action | i for a list o | Tine centiled | copies not received | 1. | • | | | |
| Attachment | Mala) | | | | | | | | |
| _ | e of References Cited (PTO-892) | | ۸Γ | Interview Summary (| DTO 442) | | | | |
| 2) 🔲 Notice 3) 🔯 Inform | e of Draftsperson's Patent Drawing Review (PT mation Disclosure Statement(s) (PTO-1449 or P r No(s)/Mail Date <u>12/30/03</u> , 1/16/2004 | 5) [| Tinterview Summary (Paper No(s)/Mail Dat Notice of Informal Pa Other: | te | D-152) | | | | |
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DETAILED ACTION

Election/Restrictions

1. Applicant's election of Group II, claims 38-63, with election of species, in the reply filed on 1/19/2006 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Following a search of the prior art, the remaining species are joined for examination.

Claim Rejections - 35 USC § 112

- 2. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 3. Claims 38-63 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- (a) In claim 38 (and all claims dependent thereon), the intended scope of "catalyst component" is unclear because it cannot be determined whether the scope of the component requires a catalyst compound, or whether it can be any component of a catalyst system. The specification defines "catalyst compound" as a transition metal compound activatable for olefin oligomerization/ polymerization [0019], but does not appear to require that a catalyst component contain a catalyst compound.

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(b) Claim 39 (and all claims dependent thereon) are indefinite in that it cannot be determined whether the "carrier" is in addition to the support specified in the parent claim. A literal reading of the claim would appear require that the claim include both a support (from the parent claim) and "further comprise ... a carrier" (from claim 39), for a total of two supports/carriers.

(c) Claim 56 (and all claims dependent thereon) are indefinite because the scope of "additionally discovered catalyst compound" cannot be determined.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 38-50 and 52-63 are rejected under 35 U.S.C. 102(b) as being anticipated by Reddy et al. (US 6,214,949).

The reference discloses in Examples 25-29 a catalyst composition comprising contacting a supported ZN catalyst, a first metallocene and a second metallocene in the presence of MAO and TEAI, including all claimed limitations.

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6. Claims 38-46 and 48-63 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Nemzek et al. (US 6,069,213).

The reference discloses in Examples 3, 4, 7 and 8 a catalyst composition comprising a silica-supported catalyst comprising MAO (as first catalyst component) and either BuCpZ or SIZR-2 (as second catalyst component), mixed with an unsupported metallocene comprising either BuCpZ or SIZR-2, including all claimed limitations.

In the event that the intended scope of "catalyst component" is one which requires a "catalyst compound" as defined in the specification, then the use of a second metallocene in the supported composition would be obvious in view of the disclosure at col. 1, lines 24-28, which recommends using "at least one supported metallocene" for the stated purpose of improved control of the polymerization. One of ordinary skill in the art would be further motivated to use two metallocenes on a support because patentee has exemplified such a component in Example 5.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roberto Rábago whose telephone number is (571) 272-1109. The examiner can normally be reached on Monday - Friday from 8:00 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Roberto Rábago Primary Examiner

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RR April 3, 2006